



Dart Hawkesbury
1270 Aberdeen St Hawkesbury, ON K6A 1K7 Canada
Tel (613) 632-5200
Fax (613) 632-5246

Purchasing Receipts

PO No	Supplier	Line Item No	Rel No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Container No	Status	Receive Date	Price/Unit	Aging Days	Past Due	Total	Supplier Name	
P0040841	ACI001-VC	1	1	Net 30	M6061T6S.063	6061-T6 .063 Sheet : MATERIAL: 6061-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/11 OR AMS-QQ-A-250/11 CR AMS 4025 OR AMS 4027 OR ASTM B209 receive sf				96	8/24/2018	96		S105486	Stock	8/27/2018	\$ 3.30 / sf	1		\$316.53	Acier Ouellette Inc.	
		2			M304S16GA	304/316 Sheet .063 : MATERIAL: AISI 304/316 SS SHEET ANNEALED AS PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240				160		160		S105487	Stock	8/27/2018	\$ 7.72 / sf	1		\$1,234.59	Acier Ouellette Inc.	
		3			M304S18GA	304/316 .050 Sheet : MATERIAL: AISI 304/316 SS SHEET ANNEALED AS PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240				128		128		S105488	Stock	8/27/2018	\$ 7.62 / sf	1		\$975.61	Acier Ouellette Inc.	
		5			M303R1.000	303 Round Bar 1.00 : MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582 NOTE:304/316 NOT ACCEPTABLE receive ft				36		36		S105837	Stock	8/27/2018	\$ 8.70 / ft	1		\$313.30	Acier Ouellette Inc.	
		7			M6061T6B1.250X2.000	6061T6 Bar 1.250 X 2.000 : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ- A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ- A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft				12		12		S105838	Stock	8/27/2018	\$ 10.32 / ft	1		\$123.84	Acier Ouellette Inc.	
										Total:	432		432								\$2,290.23	

Plex 8/28/2018 10:26 AM dart.Tollis.Andrew



Order - Customer

Copy

CO00106417

ACIER OUELLETTE INC.
935, Boul. du Havre
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

Billed to

DART AEROSPACE LTD

Shipped to

Att : CHANTAL LAVOIE Tél.: 613-632-5200

Delivery Route 5

Customer N°
Date
Delivery date
Your order N°
Processed by
Salesman
Carrier
Credit Terme

CL10001056
2018/08/24
2018/08/27
PO040841
Bonnie Fraser
BONNIE FRASER
OUELLETTE VALLEYFIELD
Net 30 Days

Product Description	Weight	Qty	UM	PCS NB			Internal Use Only			
				CMD	EXP	B/O	IN	I	S	C
1 ALU SHEET .064 (14G) 6061-T6 (4 X 8) FEAL-064486061 3 X 4' X 8' HEAT: 6150987001 <i>A1</i>	86.50	96.00	PI2_\$CLB	0.00	<i>3x12'</i>					
2 SHEET SS 16G SS304-2B (4 X 8) FESS-16G483042B 5 X 4' X 8' - 2B FINISH HEAT: C270094	420.00	160.00	PI2_\$CLB	0.00	<i>5x12'</i>					
3 SHEET SS 18G SS304-2B (4 X 8) FESS-18G483042B 4 X 4' X8' - 2B FINISH HEAT: 088E <i>A1</i>	268.80	128.00	PI2_\$CLB	0.00	<i>4x12'</i>					
4 ROUND SS 1 303 (R) RSS-1303 3 x 12' rdm HEAT: 620M <i>A1</i>	96.12	36.00	PI_\$CLB	0.00	<i>3x12'</i>					
5 FLAT ALU 1 1/4 X 2-6061-T6 * FAL-1142 1 X 12' HEAT: Z00247133 <i>A1</i>	35.28	12.00	PI_\$CLB	0.00	<i>1x12'</i>					

Total Weight (LBS) : 906.70

NIR : R-109516-6

Conditions :

All sold and delivered materials remain the property of "Acier Ouellette Inc" until payment is made in full, complete and cashed. All lost materials are at the buyer's expense. The warranty offered by "Acier Ouellette Inc." is the same as offered and honored by the manufacturer and his warranty is transferred by "Acier Ouellette Inc." to the client. The buyer hereby accepts to respect the following conditions: Net 30 days from billing date and the buyer accepts to pay administration charges of 2% per month (24% per annum) on all past due amounts over 30 days. Any default in respect with this contract will lead to payment by acceleration and permits to the seller, at his choice to claim for the balance due or the repossession of the goods sold. All claims must be made within five (5) days with this document enclosed. Any merchandise that has been damaged, cut or modified cannot be returned. All goods returned must be with our authorization and are subject to a 25% restocking charge.

Prepared By : *SU*

Delivered By : *VA*

Time

Customer's Signature

Y M D
18 08 17

148.39
296.04
3 412.23
0.00
3 412.23
GST
PST
Total (\$CAD)
Deposit
Balance



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO040841**

Supplier: ACI001-VC
Acier Ouellette Inc.
935 Boul. Du Havre
Valleyfield
QC
J6S 5L1 Canada
Phone: 800 667 4248
Fax: 450 377 5696

PO No: PO040841

PO Date: 8/24/18

Due Date: 8/31/18

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Lavoie, Chantal
clavoie@dartaero.com

E-MAILED
AUG 24 2018

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground

Pynt Terms: Net 30

Freight Terms:

Special Comments: quote no. SOU0127397

Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1 A		M6061T6S.063		6061-T6 .063 Sheet : MATERIAL: 6061-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/11 OR AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209 receive sf	Firmed	-	8/31/18	96 sf	0 sf 96sf	96 sf	\$3.2971875/sf	\$316.53
											AUG 27 2018	
2		M304S16GA		304/316 Sheet .063 : MATERIAL: AISI 304/316 SS SHEET ANNEALED AS PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240	Firmed	-	8/31/18	160 sf	0 sf 160sf	160 sf	\$7.7161875/sf	\$1,234.59
											AUG 27 2018	
3 A		M304S18GA		304/316 .050 Sheet : MATERIAL: AISI 304/316 SS SHEET ANNEALED AS PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240	Firmed	-	8/31/18	128 sf	0 sf 128sf	128 sf	\$7.6219531/sf	\$975.61
											AUG 27 2018	
4		M304B0.625X3.000		304 Bar .625 X 3.00 : MATERIAL: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE AS PER ASTM A276 OR ASTM A240 NOTE: AISI 303 NOT ACCEPTABLE receive ft	Firmed	-	8/31/18	6 ft	0 ft	6 ft	\$45.155/ft	\$270.93
5 A		M303R1.000		303 Round Bar 1.00 : MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582 NOTE: 304/316 NOT ACCEPTABLE receive ft	Firmed	-	8/31/18	36 ft	0 ft 36ft	36 ft	\$8.7027/ft	\$313.30
											AUG 28 2018	

Items												
Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
6		MT-BRONZE-C63000-R2.500		Bronze C63000 Round Bar 2.500" : MAT'L AS PER BRONZE C63000 AS PER ANS 4640 OR ASME SB150 OR ASTM B150 OR SAE J461 OR SAE J463	Firmed	-	8/31/18	2 ft	0 ft	2 ft	\$284.475/ft	\$568.95
7 A		M6061T6B1.250X2.000		6061T6 Bar 1.250 X 2.000 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed	-	8/31/18	12 ft 12 ft	0 ft	12 ft	\$10.32/ft	\$123.84
8		MT-4140-R4.500		AISI 4140 Round Bar 4.500 Dia. : MATERIAL: AISI 4140 ROUND BAR MINIMUM ROCKWELL C = 20 Rc MAXIMUM ROCKWELL C = 38 Rc SPECIFICATION: ASTM A29, AMS 6349, AMS 6382, AMS 6529	Firmed	-	8/31/18	3 ft	0 ft	3 ft	\$94.4666/ft	\$283.40
Grand Total:											\$4,087.15	

Order Notes

Procurement Quality Clauses

A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)
A026 certification of material conformance
A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.



Plex 8/24/18 12:15 PM dart.lavoie.chantal

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL 6061-T6/T62/T651 ALUMINUM SHEET OR PLATE
SPECIFICATION:
QQ-A-250/11 OR AMS-QQ-A-250/11
OR AMS 4025 OR 4027
OR A6TM B265

PART NUMBER: M6061T6S XXXI X W WWW
THK WIDTH

WHERE "XXX" = THICKNESS (IN INCHES)
AND "W.WWW" = WIDTH (IN INCHES, OPTIONAL, FOR SPECIFYING CUT PLATE)
EG. 0.063" THICK SHEET = M6061T6S.063
EG. 3.5" WIDE BY 0.500" THICK PLATE = M6061T6S.500X3.500
XXX BY 4FT BY 8FT FOR SHEET

RELEASED
2010 MAR 13
REV 18-006

APPROVED

C	ADD PLATE AND T651 SPEC	ML	17.12.13
B	REFORMAT DWG. ADD B209 SPEC (ZN DB-1). REF PAR 08-020A	CP	09.07.13
A	NEW ISSUE	RF	01.06.08
REV.	DESCRIPTION	BY	DATE
DESIGN	DS	ML	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
DRAWN	ML	NO	DRAWING NO.
CHECKED	NO	JFS	M6061T6S
MFG. APPR.	JFS	HS	TITLE
APPROVED	HS	CP	6061-T6 SHEET/PLATE SPEC
DE APPR.	CP	NTS	SCALE
DATE	17.12.13		

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061T65-063
 DATE: 18/08/27

PO / BATCH NO.: P0040841/S105486

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 96sf
 QUANTITY INSPECTED: 96sf
 QUANTITY REJECTED: _____

THICKNESS ORDERED: 0.63"
 THICKNESS RECEIVED: 0.63"
 SHEET SIZE ORDERED: 4'x8'
 SHEET SIZE RECEIVED: 4'x8'

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	N	
CORRECT FINISH	Y	N	
CORROSION	Y	<u>(N)</u>	
CORRECT GRAIN DIRECTION	<u>(Y)</u>	N	
CORRECT MATERIAL PER M-DRAWING	<u>(Y)</u>	N	<u>ASTM B209</u>
CORRECT THICKNESS	<u>(Y)</u>	N	
PHOTO REQUIRED	Y	N	
CORRECT REF # TO LINK CERT	<u>(Y)</u>	N	<u>6150987001</u>
CORRECT MATERIAL IDENTIFICATION	<u>(Y)</u>	N	
CORRECT M# ON THE MATERIAL	<u>(Y)</u>	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<u>(N)</u>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: _____	SIGNED OFF BY: _____
DATE: _____	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

3425

FESS-18G483042B

TRA-2855

51269



North American Stainless Canada Inc.
740 Imperial Road North
Guelph, ON N1K1Z3
Canada

METALLURGICAL TEST REPORT

6870 Highway 42 East
Ghent, KY 41045-9615
(502) 347-6000

Certificate: 231861 2 Mail To: Ship To: Date: 10/26/2016 Page: 1
Customer: 007035 501 Steel: 304 Finish: 2B

Your Order: 781026 NAS Order: EN 0069821 14

PRODUCT DESCRIPTION

STAINLESS STEEL COIL, C.R. ANNEALED & PICKLED, UNS 30400
ASTM A240/15b, A480/15, ASME SA240/15, SA480/15, SA666/15
CHEM ONLY ON FOLLOWING ASTM: A276/16, A479/16, A484/15, A312/16
CHEM ONLY ON FOLLOWING ASME: SA312/13, SA479/13
AMS 5513J XMRK, MIL-S-5059D AMEND3 (X CROWN MEAS)
NACE MR0175/ISO 15156-3:2009 A, MR0103/07:QOS765D-A X MAG PERM
MIN. SOLUTION ANNEAL TEMP 1900F, WATER QUENCHED

REMARKS:

Mat'l is Free of Mercury Contamination. No weld repairs.
EN 10204:2004 3.1, ROHS 1 & 2 Compliant
Material is Free of Radioactive Contamination
Steel Making Process: EAF, AOD, & Cont. Casting
Product Mfg. by a Quality Mgt. Sys. in Conf. w/ISO 9001
*Melted & Manufactured in the USA; Mat'l is DEFARS Compliant

ACTIER OUELLETTE INC. P.O. - AC2438/AC2447 S.O. - 386343

Product Id	Coil #	Skid #	Thickness	Width	Weight	Length	Mark	Pieces	Commodity Code
03088E B	03088E B		.0480	48.0000	20,720 COIL		1	1	74261496

CHEMICAL ANALYSTS CM(Country of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan)
Lab Accreditation Bureau, ISO/IEC 17025, Certificate# L2323
Chemical Analysis per ASTM A751/14a

HEAT	CM	C %	CR %	CU %	MN %	MO %	N %	NI %	P %	S %
088E	US	.0450	18.0445	.4925	1.6575	.3220	.0598	8.0190	.0290	.0010
SI %										
.2470										

MECHANICAL PROPERTIES

Product Id#	Coil #	1 d o i c r	UTS KSI	20C KSI	.2% YS KSI	20C ELONG % 2"	Hard RB	Tail Hard	Grain No.
03088E B	03088E B	FT	100.15	52.12	47.23	88.00	84.00	10.00	

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical
Dept. Mgr.
KRIS LARK
10/26/2016

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M3045186A
 DATE: 18/08/27

PO / BATCH NO.: P0040841/S105488

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 128sf
 QUANTITY INSPECTED: 128sf
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.050"
 THICKNESS RECEIVED: 0.050"
 SHEET SIZE ORDERED: 4'x8'
 SHEET SIZE RECEIVED: 4'x8'

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT FINISH	<input checked="" type="radio"/> Y <input type="radio"/> N	
CORROSION	Y <input type="radio"/> N <input checked="" type="radio"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y <input type="radio"/> N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y <input type="radio"/> N	ASTM A240
CORRECT THICKNESS	<input checked="" type="radio"/> Y <input type="radio"/> N	
PHOTO REQUIRED	Y <input type="radio"/> N <input checked="" type="radio"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y <input type="radio"/> N	117088E
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y <input type="radio"/> N	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y <input type="radio"/> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input type="radio"/> N <input checked="" type="radio"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input type="radio"/> N <input checked="" type="radio"/>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AI</u> DATE: <u>18/08/27</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 304/316 SS SHEET
ANNEXED

SPECIFICATION:

MIL-S-5059
OR AMS 5513 (304)
OR AMS 5524 (316)
OR ASTM A240
OR ASME SA240

FINISH:

DART M-NUMBER
IDENTIFIER

FINISH
UNPOLISHED No. 1
UNPOLISHED No. 2D
UNPOLISHED No. 2B
POLISHED No. 3
POLISHED No. 4
BUFFED No. 6
BUFFED No. 7
BUFFED No. 8

PART NUMBER:

M304S TT GA #P
GA

WHERE "TT" = GAUGE THICKNESS
WHERE "#P" = FINISH IDENTIFIER

EG. 16 GAUGE SS SHEET 2B FINISH = M304S16GA
EG. 16 GAUGE SS SHEET No. 4 POLISHED = M304S16GA4P

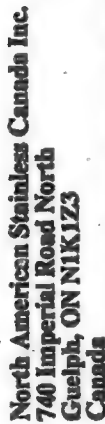
GAUGE THICKNESS REFERENCE:

GAUGE	NOM. THICK. (IN)	THICKNESS RANGE (IN)
26	0.01875	0.0178 - 0.019
25	0.021875	0.0199 - 0.023
24	0.025	0.024 - 0.026
23	0.028125	0.027 - 0.029
22	0.03125	0.030 - 0.032
21	0.034375	0.033 - 0.035
20	0.0375	0.036 - 0.040
19	0.04375	0.041 - 0.046
18	0.050	0.047 - 0.052
17	0.05625	0.053 - 0.058
16	0.0625	0.059 - 0.065
15	0.0703125	0.065 - 0.072
14	0.078125	0.073 - 0.083
13	0.08375	0.084 - 0.098
12	0.108375	0.099 - 0.114
11	0.125	0.115 - 0.130
10	0.140625	0.131 - 0.145
9	0.15625	0.146 - 0.160
8	0.171875	0.161 - 0.176
7	0.1875	0.182 - 0.194
6	0.2031	0.194 - 0.212
5	0.2188	0.201 - 0.228
4	0.2344	0.225 - 0.243
3	0.2500	0.238 - 0.262
2	0.2656	0.254 - 0.278
1	0.2813	0.269 - 0.293
0	0.3125	0.301 - 0.325

RELEASED
2015 FEB 04
ECN 15-322 97

REV.	DESCRIPTION	DATE
D	ADDED GAUGES 0-7.	15.01.06
C	DEFINED FINISH OPTION (ZN CB) AND EXAMPLE OF MATERIAL FIN WITH FINISH OTHER THAN 2B (ZN B5).	MB 12.09.20
B	REFORMAT DWG. ADD ASTM/ASME SPECS (ZN D8-1). ADD GAUGE REF (CB-1). REF PAR 08-020A	CP 09.06.01
A	NEW ISSUE	DS 01.09.24
REV.	DESIGN	DATE
DRAWN	DS	
CHECKED	AJS	
MFG. APPR.		
APPROVED		
DE APPR.		
DATE	15.01.06	
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
DRAWING NO. M304S		
TITLE 304/316 SS SHEET		
REV. D SHEET 1 OF 1		
SCALE NTS		
COPYRIGHT © 2001 BY DART AEROSPACE LTD ALL RIGHTS RESERVED. NO PART OF THIS DRAWING OR SPECIFICATION MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM.		

1-45



Customer: 007080 003

Date: 1/15/2018 **Page:** 1

Stool 303

violin: 2D

Corrosion:

Your Order: M16001

WAS ORDER: IN 0257533 09 Heat Treat Code: 44,554

Red Ratio: 69.4 : 1

PRODUCT DESCRIPTION:

Round Bar, Annealed, Cold Draw

ASTM A582/12 EN 10204 3.1, ASTM A484/16

AM9 5640V TYPE 1, 08B-764B CONDITION A

COLLECTION AERIAL TIME 19007 H04, ASTM F899/12b

COLLECTION AERIAL TIME 19007 H04, ASTM F899/12b

COLLECTION AERIAL TIME 19007 H04, ASTM F899/12b

REMARKS:

COMPLIES W/REQUIREMENTS OF DFAR 252.225-7009 HU DIRECTIVE

2011/65/WT. NOUG. EAY+AGD+CC. NO WELD REPAIR. WELTED AND MFG

NO. 100/1000000. THE ABOVE IS A NEWLY INVENTED METHOD OF

Country of Origin	Lab Accreditation Bureau, ISO/IEC 17025, Certificate#	Chemical Analysis per ASTM A751-14a
USA (United States)	ZAI(South Africa)	JP(Japan)
ES(Spain)		
CM(Country of Mali)		
CA		
AT		
IT		
GB		
Y		
V		
N		
A		
W		
T		
C		
M		

MECHANICAL PROPERTIES

Product Id	1 d o i c z	HB No.	.2YS KSI	UTS KSI	RA %	Elug % 4D
BJ1762 6	R L	224.0	80.28	106.52	34.99	25.11

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

**Technical
Dept. Mgr.**

KRIS LARK

1/15/2018

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 303 SS ROUND BAR
(NOTE: AISI 304/316 NOT ACCEPTABLE)

SPECIFICATION: ASTM A582
PART NUMBER: M303R0-000
DIA

WHERE "D.DDD" = DIAMETER IN INCHES
EG. 0.75" ROUND BAR = M303R0.750

RELEASED
R 2010-02-02
MR

B	REFORMAT DWG. ADD SPECS (2N D8-1)	CP	10.01.05
A	NEW ISSUE	DS	01.12.20
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG APPR.			
APPROVED			
DE APPR.			
DATE	10.01.05		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. M303R			
TITLE 303 ROUND BAR			
REV. B			
SHEET 1 OF 1			
SCALE			
NT'S			
COPYRIGHT © 2001 BY DART AEROSPACE LTD			

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M303R1.000
DATE: 18/08/28

PO / BATCH NO.: P2040841/5105837

MATERIAL CERT REC'D: Yes
QUANTITY RECEIVED: 36ft
QUANTITY INSPECTED: 36ft
QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.000"
THICKNESS RECEIVED: 1.000"
SHEET SIZE ORDERED: -
SHEET SIZE RECEIVED: -

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="radio"/> N	
CORRECT FINISH	<input checked="" type="radio"/> Y N	
CORROSION	Y <input checked="" type="radio"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y N	ASTM A582
CORRECT THICKNESS	<input checked="" type="radio"/> Y N	
PHOTO REQUIRED	Y <input checked="" type="radio"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y N	UT: 620M
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y N	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="radio"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="radio"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>DL</u>	SIGNED OFF BY: _____
DATE: <u>18/08/28</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

KAISER ALUMINUM FABRICATED PRODUCTS

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
5205 KAISER DRIVE
KALAMAZOO, MI 49048

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

Best in Class

Heat: Z00247132

*P0,14422
50354*

CUSTOMER PO NUMBER: 4500863587-1		CUSTOMER PART NUMBER: 160001442		PRODUCT DESCRIPTION: 1.250 X 2.000 SC RECT BAR	
KAISER ORDER NUMBER: 6047062	LINE ITEM: 001	SHIP DATE: 02/02/2018	KAISER LOT NUMBER: Z00247132	ALLOY: 6061	TEMPER: T6511
WEIGHT SHIPPED: 988.000 LB	QUANTITY: 28.000 PCS	B/L NUMBER: 621690	DIAM/DAF/THKNS: 	WIDTH: 	LENGTH: 12.000 FT
SHIP TO:			SOLD TO:		

Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CONDUCT.	BEND
Z00247132	0001	0001	44.8	39.6	17.0	RE 90	N/A	N/A
Z00247132	0001	0002	52.7	49.2	16.9	RE 93	N/A	N/A
Z00247132	0001	0003	44.3	39.7	12.4	RE 93	N/A	N/A
Z00247132	0001	0004	44.3	39.1	14.4	RE 91	N/A	N/A
Z00247132	0001	0005	44.7	39.7	18.8	RE 92	N/A	N/A
Z00247132	0001	0006	45.4	40.3	15.8	RE 92	N/A	N/A

Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
108136	.62	.25	.22	.09	.83	.07	.05	.02	.00	.00	.00	.01	.03

Applicable Requirements:

ASTM-B221-14 STENCILED ASME-SB221 2009 SECT II AMS-QQ-A-200/8A UNS#A96061 (T6511 also conforms to T6-not applicable to other tempers)

Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA

MERCURY IS NOT A NORMAL BACKGROUND ELEMENT IN ALUMINUM ALLOYS. NEITHER MERCURY NOR ANY OF ITS COMPOUNDS ARE UTILITZED BY KAISER ALUMINUM IN THE MANUFACTURE OF THIS MATERIAL.

Plant Serial: 00320040

Kaiser Order Number: 6047062

Line Item: 001

KAISER
ALUMINUM
FABRICATED PRODUCTS

Best in Class

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
5205 KAISER DRIVE
KALAMAZOO, MI 49048

CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

Aimee L. Macnowski, Quality & Technology Manager

Aimee L. Macnowski

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: 6061-T6/T651/T6516/T6511/T62 ALUMINUM BAR

SPECIFICATION: QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)
OR ASTM B211 OR ASTM B221

B

PART NUMBER: M6061T6B | T.TTT | X | WWW.WWW | THICK | WIDTH

WHERE "T.TTT" = THICKNESS IN INCHES
"WWW.WWW" = WIDTH IN INCHES

E.G. 1.0" X 12.0" BAR = M6061T6B1.000X12.000

RELEASED
R 2009-03-03
MAD

B	REMOVE QQ-A-250/11 OPTION, REFORMAT NOTES, ADD ASTM B211/B221 (Zn D7-1)	CP	09 07 13
A	NEW ISSUE	DS	01 06 08
REV	DESCRIPTION	BY	DATE
DESIGN	DS		
DRAWN	g		
CHECKED	AJS		
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	09.07.13		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. M6061T6B			
REV. B			
SHEET 1 OF 1			
TITLE			
6061-T6 BAR			
SCALE			
NTS			
COPYRIGHT © 2001 BY DART AEROSPACE LTD THIS DOCUMENT IS THE PROPERTY OF DART AEROSPACE LTD. IT IS TO BE USED ONLY FOR THE PURPOSES FOR WHICH IT WAS ISSUED AND NOT FOR ANY OTHER PURPOSES.			

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061 T6 B1.250x2.00
 DATE: 18/08/28

PO / BATCH NO.: P0040841 / S105838

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 12ft
 QUANTITY INSPECTED: 12ft
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.250"
 THICKNESS RECEIVED: 1.250"
 SHEET SIZE ORDERED: -
 SHEET SIZE RECEIVED: -

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="radio"/> N	
CORRECT FINISH	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	
CORROSION	Y <input checked="" type="radio"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	<u>A STM B221</u>
CORRECT THICKNESS	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	
PHOTO REQUIRED	Y <input checked="" type="radio"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	<u>MT: 200247132</u>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="radio"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="radio"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u> DATE: <u>18/08/28</u>	SIGNED OFF BY: _____ DATE: _____

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